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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,177	07/20/2000	James W. Shade	CTH / 108	3895

26875 7590 11/28/2003

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EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/620,177

Applicant(s)

SHADE ET AL.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-14,18-21 and 23-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 6-14, 18-21, 23-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7-10, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Perkins (US# 1829236).

Perkins discloses a pipe coupling having a generally cylindrical metal sleeve (figure 2), having first and second sides, at least one rigid and radially inwardly directed annular corrugation on the first side of the sleeve being adapted to cooperatively engage the annular corrugation on the first pipe section end, and a bell 21 on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve.

Regarding claim 2, Perkins discloses the sleeve as being split (column 1, line 56). The method limitation of the sleeve being formed from a flat sheet fails to further structurally define the coupling over that of Perkins.

Regarding claim 10, Perkins discloses a gasket 25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 6-14, 18-20, and 25-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claes et al (US#5326138).

Claes et al disclose a pipe coupling having a generally cylindrical sleeve C, having first and second sides, at least one rigid and radially inwardly directed annular corrugation 10 on the first side of the sleeve being adapted to cooperatively engage the annular corrugation on the first pipe section end, and a bell on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve. Claes et al lack the disclosure of the coupling being made of metal. Material selection is well known in the art, and both plastic and metal are known as suitable equivalents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device of Claes et al from metal to simplify manufacture and decrease the cost of the device. Note the instant specification discloses both metal and plastic as preferred materials, and *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Regarding claims 1 and 8, see figure 1.

Regarding claims 25 and 31, Claes et al disclose a radially inwardly directed annular projection 44 (see figure 7).

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Regarding claim 12, Claes et al disclose a fluted gasket 30.

Regarding claims 2, 9, 26, and 32, Claes et al lack forming the sleeve from a flat sheet. It is well known in the art to form couplings from sheet material. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the coupling of Claes et al from a flat sheet as an obvious manufacturing process allowing the use of inexpensive sheet material, reducing the costs of the device.

Regarding claims 20 and 41, Claes et al disclose all the limitations of the instant claims with exception to sealant. The use of sealant is well known in the art to provide a fluid tight connection. It would have been obvious to one of ordinary skill in the art to utilize sealant in the connection of Claes et al to further increase the sealing capabilities of the connection.

Regarding claims 14 and 36, Claes et al lack a flat gasket, instead, showing a fluted gasket. Flat gaskets are well known in the art. It would have been obvious to one of ordinary skill in the art to utilize a flat gasket in place of the fluted gasket of Claes et al as an obvious alternate means for providing the seal.

Claims 1, 6-8, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP6-185681.

JP 6-185681 disclose a pipe coupling having a generally cylindrical sleeve (figure 5 or 7), having first and second sides, at least one rigid and radially inwardly directed

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annular corrugation on the first side of the sleeve being adapted to cooperatively engage the annular corrugation on the first pipe section end, and a bell on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve. JP 6-185681 lack the disclosure of the coupling being made of metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device of JP 6-185681 from metal to simplify manufacture and decrease the cost of the device. Note the instant specification discloses both metal and plastic as preferred materials, and *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Claims 6, 18, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US#1829236).

Regarding claims 6 and 18, Perkins discloses all the limitations of the instant claims with exception to an outwardly extending flange on the bell. Flanges are well known in the art to aid in the assembly of couplings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an outwardly extending flange on the bell of Perkins to aid in the assembly of the device.

Regarding claim 20, Perkins discloses all the limitations of the instant claim with exception to sealant on the first side of the sleeve. Perkins suggest the use of sealant in one embodiment (column 3, lines 17-20) to reliably seal the joint. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further include sealant in the embodiment of figure 2 as taught in the embodiment of figure 3 to further seal and secure the joint.

Regarding claim 21, and 23-24, Perkins discloses all the limitations of the instant claim with exception to the method steps of forming the coupling from a flat sheet and wrapping the sheet around the first pipe to secure it. Perkins disclose forming the coupling of metal and that it may be split. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the split coupling from sheet material and further wrap it around the pipe end as an obvious means of assembly of the pipes and coupling.

Response to Arguments

Applicant's arguments filed 8/25/03 have been fully considered but they are not persuasive.

Regarding Claes et al, the reference teaches a corrugation 10 which is capable of engaging a corrugation of the first pipe. Note the claims broadly recite "adapted to cooperatively engage the annular corrugation on the first pipe"

Regarding JP 6-185681, the relied upon figures are that of the prior art described in the reference. While the disclosure of JP 6-185681 may be directed towards blow molding, it is maintained that it would be obvious to form coupling of the prior art figure from any suitable material.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

BTK
November 17, 2003


JACK LAVINDER
SUPERVISORY PATENT EXAMINER
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